

# Component Documentation

The component provides a flexible overlay system for displaying contextual information, help text, and guided tour content. Built with advanced positioning logic and multiple navigation variants, it's perfect for creating interactive user experiences.

## How to use

### Basic Usage

Simple popover implementation with default settings and basic content display.

```

<aava-button
  avaPopover
    [avaPopoverData]="samplePopoverData"
    [avaPopoverPosition]='top'
    [avaPopoverArrow]='center'
    [label]='Show Popover'
    [variant]='primary'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="learnMorePopoverData"
    [avaPopoverPosition]='bottom'
    [avaPopoverArrow]='center'
    [avaPopoverShowLearnMore]="true"
    [label]='Show with Learn More'
    [variant]='secondary'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="multiStepPopoverData"
    [avaPopoverPosition]='right'
    [avaPopoverArrow]='center'
    [avaPopoverShowButtons]="true"
    [avaPopoverShowPagination]="true"
    [label]='Show Multi-step'
    [variant]='success'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>

```

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```

samplePopoverData: PopOverData[] = [
  {
    header: 'Welcome!',
    description: 'This is a simple popover with basic content.',
  },
];

learnMorePopoverData: PopOverData[] = [
  {
    header: 'Learn More',
    description:
      'This popover includes a learn more link for additional information.',
    learnMoreUrl: 'https://example.com',
  },
];

multiStepPopoverData: PopOverData[] = [
  {
    header: 'Step 1',
    description: 'This is the first step of the multi-step popover.',
  },
  {
    header: 'Step 2',
    description: 'This is the second step with additional information.',
  },
];

```

```
    },  
    {  
      header: 'Step 3',  
      description: 'This is the final step with completion details.',  
    },  
  ],  
];
```

## Basic Features

- Flexible Positioning : Automatic positioning with arrow alignment
- Content Management : Support for header, description, and optional learn more links
- Responsive Design : Adapts to different screen sizes and content lengths
- Accessibility : Built-in accessibility features and keyboard navigation
- Animation : Smooth entrance animations with stretch effects

## Positioning Options

Four positioning variants with intelligent arrow placement and automatic boundary detection.

```
<aava-button
  avaPopover
    [avaPopoverData]="topPopoverData"
    [avaPopoverPosition]='top'
    [avaPopoverArrow]='center'
    [label]='Show Top'
    [variant]='primary'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="bottomPopoverData"
    [avaPopoverPosition]='bottom'
    [avaPopoverArrow]='center'
    [label]='Show Bottom'
    [variant]='secondary'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="leftPopoverData"
    [avaPopoverPosition]='left'
    [avaPopoverArrow]='center'
    [label]='Show Left'
    [variant]='success'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="rightPopoverData"
    [avaPopoverPosition]='right'
    [avaPopoverArrow]='center'
    [label]='Show Right'
    [variant]='warning'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="startArrowPopoverData"
    [avaPopoverPosition]='top'
    [avaPopoverArrow]='start'
    [label]='Start Arrow'
    [variant]='info'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
<aava-button
  avaPopover
    [avaPopoverData]="centerArrowPopoverData"
    [avaPopoverPosition]='top'
    [avaPopoverArrow]='center'
    [label]='Center Arrow'
    [variant]='primary'
    [outlined]="true"
    pressedEffect="ripple"
></aava-button>
```

```

<aava-button
  avaPopover
  [avaPopoverData]="endArrowPopoverData"
  [avaPopoverPosition]='top'
  [avaPopoverArrow]='end'
  [label]='End Arrow'
  [variant]='secondary'
  [outlined]="true"
  pressedEffect="ripple"
></aava-button>

```

```
---
```

```

topPopoverData: PopOverData[] = [
  {
    header: 'Top Position',
    description:
      'This popover appears above the target element with a downward arrow.',
  },
];

bottomPopoverData: PopOverData[] = [
  {
    header: 'Bottom Position',
    description:
      'This popover appears below the target element with an upward arrow.',
  },
];

leftPopoverData: PopOverData[] = [
  {
    header: 'Left Position',
    description:
      'This popover appears to the left of the target element with a rightward arrow.',
  },
];

rightPopoverData: PopOverData[] = [
  {
    header: 'Right Position',
    description:
      'This popover appears to the right of the target element with a leftward arrow.',
  },
];

startArrowPopoverData: PopOverData[] = [
  {
    header: 'Start Arrow',
    description: 'Arrow positioned at the beginning of the popover.',
  },
];

centerArrowPopoverData: PopOverData[] = [
  {
    header: 'Center Arrow',
    description: 'Arrow centered on the popover (default).',
  },
];

endArrowPopoverData: PopOverData[] = [

```

```

{
  header: 'End Arrow',
  description: 'Arrow positioned at the end of the popover.',
},
];

```

## Available Positions

- Top - Appears above the target element with downward arrow
- Bottom - Appears below the target element with upward arrow
- Left - Appears to the left of the target element with rightward arrow
- Right - Appears to the right of the target element with leftward arrow

## Arrow Alignment

- Start - Arrow positioned at the beginning of the popover
- Center - Arrow centered on the popover (default)
- End - Arrow positioned at the end of the popover

## API Reference

### Inputs

| Property | Type          | Default | Description                               |
|----------|---------------|---------|---|
| config   | PopoverConfig | -       | Configuration object for popover behavior |
| data     | PopoverData[] | []      | Array of content items to display         |

### PopoverConfig Interface

| Property | Type                                | Default | Description                         |
|----------|-------------------------------------|---------|-------------------------------------|
| arrow    | 'start'   'center'   'end'   null   | null    | Arrow alignment position            |
| position | 'top'   'bottom'   'left'   'right' | 'top'   | Popover position relative to target |
| left     | number                              | 0       | Target element left position        |
| top      | number                              | 0       | Target element top position         |
| bottom   | number                              | 0       | Target element bottom position      |
| width    | number                              | 0       | Target element width                |
| height   | number                              | 0       | Target element height               |

| Property       | Type     | Default | Description                        |
|----------------|----------|---------|------------------------------------|
| showButtons    | boolean? | false   | Whether to show navigation buttons |
| showPagination | boolean? | false   | Whether to show page counter       |
| showIcon       | boolean? | false   | Whether to show icon navigation    |
| showSkip       | boolean? | false   | Whether to show skip button        |
| showLearnMore  | boolean? | false   | Whether to show learn more button  |

## PopOverData Interface

| Property     | Type    | Default | Description                               |
|--------------|---------|---------|---|
| header       | string  | -       | Header text for the popover               |
| description  | string  | -       | Description text for the popover          |
| learnMoreUrl | string? | -       | Optional URL for learn more functionality |

## Properties

| Property     | Type               | Description                               |
|--------------|--------------------|---|
| visible      | boolean            | Whether the popover is currently visible  |
| currentIndex | number             | Current page index for multi-page content |
| currentData  | PopOverData   null | Current content data being displayed      |
| currentPage  | string             | Current page display string (e.g., "2/5") |
| hasPrevious  | boolean            | Whether previous page is available        |
| hasNext      | boolean            | Whether next page is available            |

## Methods

| Method             | Parameters  | Return Type | Description                                     |
|--------------------|-------------|-------------|---|
| previous()         | event?: any | void        | Navigate to previous page                       |
| next()             | event?: any | void        | Navigate to next page                           |
| skip()             | event?: any | void        | Close popover and skip content                  |
| learnMore()        | event?: any | void        | Open learn more URL in new tab                  |
| updatePosition()   | -           | void        | Update popover position and arrow placement     |
| setArrowPosition() | -           | void        | Set CSS custom properties for arrow positioning |

## CSS Custom Properties

The component uses CSS custom properties for theming and styling:

| Property                     | Default | Description                     |
|------------------------------|---------|---------------------------------|
| --popover-background         | Dynamic | Background color of the popover |
| --popover-text               | Dynamic | Text color of the popover       |
| --popover-font               | Dynamic | Font family for the popover     |
| --popover-padding            | Dynamic | Internal padding of the popover |
| --popover-border-radius      | Dynamic | Border radius of the popover    |
| --popover-max-width          | Dynamic | Maximum width of the popover    |
| --popover-z-index            | Dynamic | Z-index for layering            |
| --popover-shadow             | Dynamic | Box shadow for the popover      |
| --popover-border-color       | Dynamic | Border color of the popover     |
| --popover-content-gap        | Dynamic | Gap between content sections    |
| --popover-header-font-family | Dynamic | Font family for the header      |
| --popover-header-font-size   | Dynamic | Font size for the header        |
| --popover-header-font-weight | Dynamic | Font weight for the header      |
| --popover-header-color       | Dynamic | Color for the header text       |
| --popover-header-line-height | Dynamic | Line height for the header      |



| Property                           | Default | Description                              |
|------------------------------------|---------|--|
| --popover-description-font-family  | Dynamic | Font family for the description          |
| --popover-description-font-size    | Dynamic | Font size for the description            |
| --popover-description-font-weight  | Dynamic | Font weight for the description          |
| --popover-description-color        | Dynamic | Color for the description text           |
| --popover-description-line-height  | Dynamic | Line height for the description          |
| --popover-footer-margin-top        | Dynamic | Top margin for the footer                |
| --popover-pagination-font-size     | Dynamic | Font size for pagination text            |
| --popover-pagination-font-weight   | Dynamic | Font weight for pagination text          |
| --popover-pagination-color         | Dynamic | Color for pagination text                |
| --popover-pagination-font-family   | Dynamic | Font family for pagination text          |
| --popover-pagination-line-height   | Dynamic | Line height for pagination text          |
| --popover-button-gap               | Dynamic | Gap between navigation buttons           |
| --popover-button-width             | Dynamic | Width of navigation buttons              |
| --popover-button-height            | Dynamic | Height of navigation buttons             |
| --popover-disabled-opacity         | Dynamic | Opacity for disabled button states       |
| --popover-hover-background         | Dynamic | Background color for button hover states |
| --popover-hover-border-radius      | Dynamic | Border radius for button hover states    |
| --popover-arrow-border-width       | Dynamic | Width of arrow border                    |
| --popover-arrow-border-width-inner | Dynamic | Width of inner arrow border              |
| --popover-arrow-border-shadow      | Dynamic | Color of arrow border shadow             |
| --popover-arrow-color              | Dynamic | Color of arrow fill                      |

## Best Practices

## Content Guidelines

- Keep it concise : Popovers work best with short, focused content
- Use clear headers : Make the purpose of the popover immediately clear
- Provide actionable content : Include learn more links or navigation when appropriate
- Consider context : Position popovers to avoid covering important interface elements

## Positioning Guidelines

- Choose appropriate positions : Use top/bottom for horizontal content, left/right for vertical content
- Align arrows thoughtfully : Center arrows for balanced content, start/end for directional emphasis
- Avoid boundaries : Ensure popovers don't extend beyond viewport edges
- Consider scrolling : Position popovers to remain visible during page scroll

## Navigation Guidelines

- Match user expectations : Use familiar navigation patterns (prev/next, pagination)
- Provide clear feedback : Show current position and available actions
- Include skip options : Allow users to bypass content when appropriate
- Use consistent styling : Maintain visual consistency across navigation elements

## Technical Notes

### Component Architecture

The popover component uses a modern Angular architecture with:

- PopOverComponent - Main component with positioning and navigation logic
- IconComponent integration for icon-based navigation
- ViewChild references for DOM manipulation and positioning
- ChangeDetectionStrategy.OnPush for performance optimization

### Positioning System

The component implements an advanced positioning system:

- Automatic positioning based on target element coordinates
- Arrow alignment with CSS custom properties for precise placement
- Boundary detection to prevent overflow beyond viewport
- Scroll and resize handling for responsive positioning

### Animation System

The component provides smooth entrance animations:

- Stretch effects for natural expansion from target elements
- Position-based animations with appropriate transform origins
- CSS keyframes for consistent and performant animations
- Smooth transitions for opacity and transform changes

### Event Handling

The component manages multiple event types:

- Navigation events for page changes and content progression
- User interaction for skip, learn more, and navigation actions
- Window events for scroll and resize handling
- Lifecycle events for proper cleanup and memory management

## **CSS Architecture**

The component uses a comprehensive CSS architecture:

- CSS custom properties for theming and customization
- BEM-like naming for maintainable and scalable styles
- Position-based modifiers for different placement variants
- Responsive design with flexible layouts and sizing

## **Accessibility Features**

The component includes built-in accessibility features:

- Keyboard navigation for all interactive elements
- ARIA attributes for screen reader compatibility
- Focus management for proper tab order and focus indicators
- Semantic markup for clear content structure and meaning